ABSTRACT

SOCIAL WORK

HILL, JOI E. B.A. CLARK ATLANTA UNIVERSITY, 1993

THE EFFECTS OF INCLUSION ON THE COGNITIVE AND SOCIAL SKILLS OF PRESCHOOL CHILDREN

Advisor: Amos Ajo, Ph.D.

Thesis dated March 27, 1996

This study was designed to evaluated an inclusive program at a preschool for children with special learning needs. It was hypothesized that when placed in a classroom setting with typical children, children with special learning needs will increase their cognitive and social skills.

A Quasi Classical Experimental Design was used to evaluate the program. The experimental group consisted of six children with special learning needs and three typically developing children. The control group consisted of six children with special learning needs. The subjects ranged in age from thirteen to thirty-four months and had similar disabilities. The Hawaii Early Learning Profile (HELP) was used to assess each child's level of functioning.

A t-Test analysis of the results indicated that there was a statistically significant difference between the experimental and control groups in the area of social skills, but lacked statistical significance in the area of cognitive skills.

THE EFFECTS OF INCLUSION ON THE COGNITIVE AND SOCIAL SKILLS OF PRESCHOOL CHILDREN

A THESIS

SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

THE DEGREE OF MASTER OF SOCIAL WORK

BY

JOI E. HILL

SCHOOL OF SOCIAL WORK

ATLANTA, GEORGIA

March 1996

ACKNOWLEDGMENTS

I would like to begin by thanking God for allowing me the opportunity to pursue this Master's Degree in Social Work. I would especially like to thank my parents, Joe and Beverly Hill, and my sister, JoJuan Hill, for all of the support, guidance, and prayers that they have offered during this journey. I would like to thank The Elaine Clark Variety Center for allowing me to conduct my evaluation at their facility. Finally, I would like to thank the Clark Atlanta University School of Social Work for challenging me to the fullest and for teaching me many of life's important lessons.

TABLE OF CONTENTS

LIST OF TABLES

Table Page

LIST OF ILLUSTRATIONS

Figure Page

CHAPTER ONE

INTRODUCTION AND STATEMENT OF THE PROBLEM

The past few years have brought the field of education to a move toward educating all children in typical classroom settings. All children include those with mental retardation, learning disabilities, and behavior disorders as well as those who are gifted and talented. The move toward total inclusion has raised many questions for educators and parents alike. How will inclusion effect the learning of the included child? Does inclusion increase the socialization skills of the children with disabilities? Inclusion, as defined by Mara Sapon-Shevin a supporter of inclusive schools, is a setting in which all children (those with and without special learning needs) are educated in a regular classroom with children their own age. [1] The goal is that all schools will be restructured to be supportive of all children, therefore, meeting the needs of the entire student body.

Inclusion is fairly new to the world of education. Its advantages and disadvantages are still being researched. In an overview of the literature on this subject, findings indicate that little attention has been given to the effect

---

[1] James O'Neil, "Can Inclusion Work," Educational Leadership 52 (December 1994/January 1995): 7.

of inclusion on the social and cognitive skills of children with developmental delays. There is particularly a lack of information as it relates to inclusion and the preschool child.

SIGNIFICANCE AND RATIONAL

In this endeavor to explore the effect of inclusion on socialization and learning, the advantages and disadvantages of inclusion can further be discussed. For the purpose of this study, the focus will be placed on the disabled children. Disabled children being those who are designated to have special learning needs. Sapon-Shevin stated that an advantage of inclusion is that all children are able to learn about those who are different from them. [2] A question that is often raised about inclusion asks if inclusive classrooms are really supportive of the children with special needs, or does he /she become intimidated by the "normal" children? Will inclusion help or hinder the development of social and cognitive skills of the children with special needs? Through this understanding, educators, administrators, and social workers will be able to better assess inclusion and its effectiveness. The information obtained from this project will not only allow educators to explore the positive aspects of inclusion, but it will also assist educators in developing a curriculum which is appropriate for both the typical

---

[2] Ibid., 9.

children and the disabled children. This project will also encourage total mainstreaming in all school's whether they be public or private, preschool or high school.

PURPOSE OF THE STUDY

The purpose of the study is to evaluate the effect of inclusion on the social and cognitive skills of preschool age children with special learning needs.

CHAPTER TWO

REVIEW OF LITERATURE

The debate of inclusion and its pros and cons has been ongoing for several years. Educators and administrators have yet to come to a workable compromise. Research shows both positive and negative results for students and teachers alike. Included in this list of benefits, constructed by Cheryl Lange and James Yseldyke, teachers will be able to set the standards for nondiscrimination and acceptance of people's differences and help students learn to build cooperative relationships with their peers. With the same token, some children will be serving as role models, while others will find that they are able to master activities that may not have been attempted in special education classrooms. On the downside, teachers will have to become adjusted to team teaching, using new equipment, and learning new ways to present material to students. The students in turn may be faced with feelings of insecurity, inadequacy and often defensiveness. [3] The challenges listed are often discussed, but there has been little research to support these assumptions.

---

[3] Richard W. Smelter, "The Benefits and Challenges of Inclusion," Educational Leadership 52 (December 1994/January 1995): 53.

Edward Baker, Margaret Wang, and Herbert Welberg recently discussed their findings on the effects of inclusion on children. They suggested that better research methods be used to assess inclusive programs. The authors use the term "meta-analysis" to describe the more objective research techniques. Meta-analysis provides a more rational approach to decision making in highly emotional issues such as the education of children with special needs. The authors went on to compare the effect of inclusive versus non-inclusive educational practices for special needs students. They found that those children educated in inclusive classrooms are better socially adapted than those children in non-inclusive classrooms. [4]

Yohanan Eshel, Michael Katz, Sara Gilat, and Carlos Nagler conducted two studies which compared students with mild learning disabilities who were enrolled in self-contained classrooms with comparable peers who were enrolled in mainstreamed classrooms. The first sample consisted of thirty-three third through sixth graders in self-contained classrooms and thirty-four third through sixth graders in mainstreamed classrooms. The second sample consisted of twenty ninth through twelfth graders in self-contained classrooms and twenty-one ninth through twelfth graders in mainstreamed classrooms. Academic self concept and academic performance of the students were assessed. The findings of

---

[4] Ibid., 34.

both studies indicated that the vast majority, almost 82 percent, of the students in the mainstreamed classrooms had higher levels of academic self concept and academic performance than the children in self-contained classrooms. [5]

Joseph Jenkins examined first through sixth graders with learning disabilities in regular, remedial, and special education classrooms. The reading vocabulary of each group was assessed by a pre-test and post-test. The results of the test revealed that those students with learning disabilities who were educated in regular classrooms had the highest level of reading vocabulary. [6]

In an evaluation of the effects of placement of students with severe disabilities in general education versus special education classrooms, researchers studied several variables related to social interaction including the number of social contacts per day, types of peer engagement, and initiation of peer engagement. The results suggested that there was a significant difference between the levels of peer engagement, the types of engagement, and the degree to which students initiate engagement. The higher levels of engagement

---

[5] Yohanan Eshel, Michael Katz, Sara Gilat and Carlos Nagler, "Mainstreamed or Self-contained Classes for Students with Mild Learning Disabilities: The Case of Israel," International Journal of Disability, Development, and Education 41 (August, 1994): 185.

[6] Joseph Jenkins, Mark Jewell, Norma Leicester and Rollanda O'Conner, "Accommodations for Individual Differences Without Classroom Ability Groups: An Experiment in School Restructuring," Exceptional Children 60 (February 1994): 344.

belonged to those students who were educated in general education classrooms. [7]

Tia Holowood, Christine Salisbury, Beverly Rainforth and Mary Polombaro studied the use of instructional time in the classrooms serving students with severe disabilities. This investigation explored the use of teacher and student time in elementary school. Children with mild to profound disabilities were enrolled in general education classrooms. The study consisted of six students with severe disabilities and twelve students without disabilities. The researchers made several observations of each classroom and recorded the time each instructor used for individual instruction. The levels and types of student engagement as well as types of interruptions were recorded. The results showed that each group had compatible levels of engaged time and that students with severe disabilities had no effect on losses of instructional time. [8]

Phyllis Levine and Eugene Edgar conducted two studies involving postgraduates of both regular and special education schools who had special learning needs. The first group consisted of 114 special education students and 144 regular

---

[7] Pam Hunt, Felicia Farron-Davis, Susan Beckstead and Deborah Curtis, "Evaluating the Effectiveness of Placement of Students With Severe Disabilities in General Education versus Special Classes," Journal of the Association for Persons with Severe Handicaps 41 (Fall 1994): 200.

[8] Tia Hollowood, Christine Salisbury, Beverly Rainforth and Mary Palombaro, "Use of Instructional Time in Classrooms Serving Students With and Without Disabilities," Exceptional Children 61 (December/January 1995): 242.

education students who graduated from high school in 1985. The second sample consisted of 109 special education students and 138 regular education students who graduated from high school in 1990. The variables assessed by the researchers were attendance of post secondary school, employment status, type of residence, marital status, and number of children. Although there was no significant difference of the employment status and number of children between the two groups, the results indicated that those students educated in regular schools were more likely to attend a post secondary school, live independently, and become married. [9]

Renee' McCall, a teacher of an inclusive physical education program for preschool children, has been an advocate of inclusion for many years. This program, called the Main Street Education Program, is a fully integrated setting serving both children with and without disabilities. The children without disabilities are able to help the disabled children increase their physical abilities through interactive play and special activities. These children receive adapted physical education five times a week for twenty five minutes. In a recent comparison of The Main Street Early Education Program and a similar physical education program exclusively serving children with disabilities, McCall found that students with disabilities

---

[9] Phyllis Levine and Eugene Edgar, "Respondent Agreement in Follow-Up Studies of Graduates of Special Education and Regular Education Programs," Exceptional Children 60 (February 1994): 334.

learn as much as or more in inclusive settings than in segregated settings. [10]

In a study conducted by Ronald Bramtett, Billy Smith, and Jane Edmonds, twenty children classified as learning disabled, twenty children classified as mildly mentally retarded, and twenty non-classified children were assessed. The Social Skills Rating System was used to determine the level of social skills of each group. The children's ages ranged from seven years, four months to sixteen years, six months. The researchers found that those children classified as learning disabled or mildly mentally retarded scored significantly lower than those children who had not been classified and who remained in mainstreamed classrooms.[11] In a similar study, a group of researchers surveyed 312 regular education teachers of kindergarten through high school age students on their perceptions of the importance of facilitating relationships between students with disabilities and non-disabled students. The subjects indicated that such friendships are possible and are beneficial not only to the

---

[10] Renee' McCall, "An Inclusive Preschool Physical Education Program," Journal of Physical Education 4 (January 1994): 45.

[11] Ronald Bramlett, Billy Smith and Jane Edmonds, "A Comparison of Nonreferred Learning Disabled and Mildly Mentally Retarded Students Utilizing the Social Skills Rating System," Psychology in the Schools 31 (January 1994): 15.

disabled student, but to the non disabled-student as well. [12]

Samantha Smith's study of the parent's perspective on inclusion, he found that the overwhelming majority of the parents of children with disabilities have positive thoughts on inclusion. She states that inclusion allows children with special needs to cope with their disabilities and receive peer education through imitation of speech, behavior, and social skills. She adds that it is impossible for children with disabilities to become contributing members of society if they are isolated from children without disabilities. [13]

In their studies of inclusion, Linda Davern and Roberta Schnorr have found that children with special needs must be placed in environments enriched with language if we expect them to develop effective language skills. These language rich environments are best guided by non-disabled peers. The authors also believe that the best place for children with disabilities to learn to live and work successfully in their communities is in regular classrooms. In order for these special children to develop the social skills which are vital for success in work and personal life, they must be exposed

---

[12] Susan Hambre, Jo Hendrickson and John Nietupski, "Regular Educator's Perceptions of Facilitating Friendships of Students With Moderate, Severe, or Profound Disabilities With Peers," Education and Training in Mental Retardation and Developmental Disabilities 29 (June 1994): 102.

[13] Samantha Smith, "A Parent's Perspective," Exceptional Parent 24 (September, 1993): 18.

to the modeling that can be provided by their typical peers.[14]

Craig Kennedy and Tiina Itkonen studied the effects of participating in regular education classes on the social life of three high school students with severe disabilities. The subjects social contacts and social networks were analyzed. The data were collected during school across one school year. Observations were made during the baseline phase. Peer tutoring and friendship programs were introduced to the subjects during the intervention phase. The results showed that, for all three students, the level of social contacts occurring within a day greatly increased during the intervention stage. [15] Another study, conducted by Nancy Meadows, Richard Neel, Catherine Scott, and Geralyn Parker, examined the academic performance and social competence of thirteen mainstreamed and six non mainstreamed sixth, seventh, and eighth grade male students with serious behavioral disorders. The researchers discovered that those children who were mainstreamed had higher reading and written language scores, better work habits, and higher grade point averages. They were also more attentive, worked harder, and

---

[14] Linda Davern and Roberta Schnorr, "Public Schools Welcome Students with Disabilities as Full Members," Children Today 20 (May 1994): 37.

15 Craig Kennedy and Tiina Itkonen, "Some Effects of Regular Class Participation on the Social Contacts and Social Networks of High school Students with Severe Disabilities," Journal of the Association for Persons with Severe Handicaps 19 (Spring 1994): 1.

were better adjusted than those students who were self-contained. [16]

Marilyn Kostka studied the social behaviors of an autistic child with moderate mental illness in a special education classroom and in a mainstream music classroom. Three behaviors were observed: arm flapping, body swaying, and appropriate participation behaviors. The results indicated that all three behaviors were less frequent in the mainstream classroom. Although the arm flapping and body swaying decreased, appropriate participation did not increase. [17] Yola Center and Craig Curry studied the feasibility of full integration for students with mild intellectual disabilities. Academic and social achievements of twenty-six students aged eight to twelve assigned to either mainstreamed or special learning classrooms were compared. A trained special educator extended special education services to the mainstreamed classroom. Their findings showed that the integrated children improved significantly more than did the segregated children in

---

[16] Nancy Meadows, Richard Neel, Catherine Scott and Geralyn Parker, "Academic Performance, Social Competence, and Mainstream Accommodations," Behavioral Disorders 19 (May 1994): 170.

[17] Maralyn Kostka, "A Comparison of Selected Behaviors of a Student With Autism in Special Education and Regular Music Education Classes," Music Therapy Perspectives 11 (May, 1993): 58.

academic skills and social interactions. [18]

In an article written to increase teacher's understanding of inclusion and its many benefits, Martin E. Block stated that inclusive settings provide opportunities that simply are not available in self contained classes. The benefits suggested by this inclusion advocate are:

(1) Inclusion provides disabled children with the opportunity to learn social skills in integrated, more natural environments.

(2) Inclusion provides disabled children with more stimulating, motivating, normalized environments.

(3) Inclusion provides disabled children with age-appropriate, non-disabled role models and peer supports.

Block's previous research indicates that with training, even preschool children can provide support for children with disabilities. [19]

The Fayette County School System developed a booklet describing their inclusive program. In this booklet, ten reasons to include children with disabilities in regular

---

[18] Yola Center and Craig Curry, "A Feasibility Study of a Full Integration Model Developed for a Group of Students Classified as Mildly Intellectually Disabled," International Journal of Disability, Development, and Education 40 (January 1993): 228.

[19] Martin E. Block, "Including Preschool Children With Disabilities," Journal of Physical Education 27 (August 1994): 47.

classes were given. One reason, in particular proved to be quite interesting as it relates to the socialization and academic performance of preschool age children. The author stated that many types of learning occur best in inclusive schools. Students with disabilities who are placed in general education classes have an environment in which to grow socially and academically. Peers are often the best models and teachers of many socially valued behaviors. [20]

THEORETICAL FRAMEWORK

This study served as an evaluation of inclusion in a preschool setting. The variables evaluated in this study were social skills and cognitive skills, and how both are effected by inclusion. For the purpose of this evaluation, cognitive skills are defined as those skills needed to enhance the permanent modification of behavior that results from the individual's experience in the environment. [21] Social skills are defined as those skills that create the channels through which children acquire the knowledge, skills, and dispositions that enable them to participate effectively in group life. [22] Inclusion is defined as the commitment to educate each child, to the maximum extent appropriate in the school and classroom he or she would

---

[20] Rebecca Reeves, "Inclusive School Communities: Ten Reasons Why," Inclusion Project (September 1993): 8.

[21] James W. Vander Zanden, Human Development (New York: McGraw-Hill Inc., 1993) 43.

[22] Ibid, 289.

otherwise attend if not disabled. [23] It is this researchers belief that the social and academic environment that inclusion provides has a positive effect on the socialization and learning of children with special needs who are placed in inclusive classrooms.

This evaluation was based on the cognitive-ecological model. This model describes the way in which people perceive, interpret, manipulate, and remember social stimuli. It emphasizes the role played by social, cultural, and affective forces that influence these cognitive processes. This model makes the assumption that the fundamental motivation for human beings is to survive in one's environment. We are motivated to adapt to our surroundings, this is how we make sense of our world and begin to understand ourselves within the world. [24] The cognitive-ecological model makes an assumption about situations as well. This model suggests that society's goals and norms no longer exert social control over its members. Individuals determine for themselves what goals should be sought and by what means. This is done by manipulating our physical environment. [25] This study evaluated how children with special learning needs survive in a classroom with typical

---

23 O'Neil, 6.

24 Aaron M Brower and Paula Norius, Social Cognition and Individual Change: Current Theory and Counseling Guidelines (London: Sage Publications, 1993) 10.

25 Ibid, 11.

children, and how he or she manipulates that environment to receive the maximum amount of stimuli. Because the cognitive-ecological model suggests that social stimuli influences cognitive processes, it is believed that inclusion stimulates students with special learning needs to enhance their cognitive skills. This will result in a higher level of learning for these students. The model also suggests that humans are motivated to survive in their environment and adapt to their surroundings. As children with special needs in inclusive classrooms are conditioned and influenced by their peers, socialization will result as a method of survival and adaptation.

HYPOTHESIS

This evaluation focused on two areas of inclusion, social skills and cognitive skills. Do typical children influence the social skills of children with special needs who are placed in inclusive classrooms? The second question raised in this evaluation asks if inclusion effects the learning of children with special learning needs? This project was based on the belief that, one, there is no statistically significant difference between inclusion and social skills of children with special needs who are placed in inclusive classrooms, and two, there is no statistically significant difference between inclusion and cognitive skills of children with special needs who are placed in inclusive classrooms.

CHAPTER THREE

METHODOLOGY

Design and Sample

A Quasi Classical Experimental Design was used to evaluate how social skills and cognitive skills were effected by inclusion. There was no randomization process used to assign the subjects to the experimental or control groups because the inclusive class was predetermined, therefore, convenience sampling was used. The experimental design was chosen to provide maximum control for threats to internal validity. The subjects in the experimental and control groups were close in age and have similar disabilities. There was a four week observation period during which the researcher familiarized herself with the children to assure that they would be comfortable with her when testing began. At the completion of the four week observation period, the pre-test was given to each child in both the experimental and control groups. The intervention, or the development of the inclusive class, was administered to the experimental group for two months followed by a post-test which was given to both the experimental and control groups. The test was administered by the researcher and the classroom teachers. The control group consisted of six children with special needs between the ages of twenty-four

months and thirty-four months. The experimental group consisted of six children with special needs between the ages of twenty-two months and thirty-five months, and three typically developing children between the ages of thirteen months and fifteen months.

Measurements

The researcher measured the social skills and cognitive skills of the children with special learning needs using the Hawaii Early Learning Profile (HELP). This is a comprehensive assessment of children's cognitive and social skills. It was developed in 1979 by O'Reilley, Furuno, Inatsuka, Hosaka, Allman, and Zeislof. This measure consists of 253 items or skills in the form of a checklist. Children's performances are recorded according to their mastery of specific skills. The following is a list of signs used to indicate the child's mastery of a skill and their meanings: **+** - The skill was observed by researcher, **R** - The skill was reported by a parent, **-** - The skill was assessed but not observed or reported, **E** - The skill appears to be emerging but not complete, consistent, or of good quality. The further along the child is on the list, the higher his/her level of development. The scores from this test are reported in months of age. It was noted that the reliability and validity of this measure has been well established. [26]

---

[26] Donald Bailey, Jr., Assessing Infants and Preschoolers with Handicaps (Columbus: Merrill Publishing Company, 1989), 263.

The research was conducted at The Elaine Clark Variety Center For The Growth And Development Of Exceptional Children. This is a center designed to provide education and therapeutic play for infants and toddlers, regardless of abilities. The test was given to each child in his/her classroom with one or both classroom teachers present.

DATA ANALYSIS

T-tests were used to test the hypotheses and to determine if there was actually a statistically significant difference between inclusion and cognitive skills and inclusion and social skills.

CHAPTER FOUR

PRESENTATION OF FINDINGS

Observations were made and information was collected for four weeks prior to the introduction of the inclusive class. At the end of the fourth week, the HELP was given to each child in the experimental and control groups. For reasons of confidentiality, the subjects will be referred to by numbers. The subjects in the experimental group will have an "E" preceding their number, and the subjects in the control group will have a "C" preceding their number. To distinguish the typical subjects in the experimental group from the subjects with special needs in the experimental group, "ET" will precede the number of the typical subjects. Subject ET1 was a thirteen month old, Caucasian, female. Her HELP scores were twenty months in social skills and eighteen months in cognitive skills. Subject ET2 was a fourteen month old, Caucasian, female. Her HELP scores were nineteen months in social skills and eighteen months in cognitive skills. Subject ET3 was a fifteen month old, Caucasian, female. Her HELP scores were twenty-four months in social skills and eighteen months in cognitive skills. (The information on the typical children has been provided simply to establish the fact that the children with special needs have significant

developmental delays.) Subject E1 was a twenty-two month old, Caucasian, male with Down Syndrome. His HELP scores were eleven months in social skills and eleven months in cognitive skills. Subject E2 was a thirty-two month old, American Indian, female with Cerebral Palsy. Her HELP scores were nine months in social skills and nine months in cognitive skills. Subject E3 was a twenty-two month old, African American, male with Down Syndrome. His HELP scores were eight months in social skills and seven months in cognitive skills. Subject E4 was a twenty-one month old, Caucasian, male with Fetal Alcohol Syndrome. His HELP scores were twenty months in social skills and fifteen months in cognitive skills. Subject E5 was a nineteen month old, Caucasian, male with a developmental delay due to Hydrocephalus. His HELP scores were seven months in social skills and seven months in cognitive skills. Subject E6 was a twenty-two month old, Caucasian, male with Cerebral Palsy. His HELP scores were eighteen months in social skills and twelve months in cognitive skills. Subject C1 was a thirty-four month old, African American, male with Cerebral Palsy and Microcephaly. His HELP scores were ten months in social skills and eleven months in cognitive skills. Subject C2 was a twenty-three month old, African American, male with Cerebral Palsy. His HELP scores were twelve months in social skills and twelve months in cognitive skills. Subject C3 was a twenty-five month old, African American, female with Down Syndrome. Her HELP scores were thirteen months in social

skills and twelve months in cognitive skills. Subject C4 was a twenty-three month old, Caucasian, male with Soto's Syndrome. His HELP scores were twelve months in social skills and twelve months in cognitive skills. Subject C5 was a twenty month old, African American, male with Fetal Alcohol Syndrome. His HELP scores were twelve months in social skills and ten months in cognitive skills. Subject C6 was a twenty-two month old, African American, male with Hydrocephalus. His HELP scores were eleven months in social skills and eleven months in cognitive skills.

TEST OF THE HYPOTHESIS

The data collected from this study are displayed in tables and a graphs which provide statistical information as well as the pre-test and post-test HELP scores. The post-test HELP scores are as follows: Subject ET1's HELP scores were twenty months in social skills and nineteen months in cognitive skills. Subject ET2's scores were twenty months in social skills and eighteen months in cognitive skills. Subject ET3's scores were twenty-four months in social skills and twenty months in cognitive skills. Subject E1's HELP scores were fourteen months in social skills and thirteen months in cognitive skills. This indicates a three month increase in social skills and a two month increase in cognitive skills. Subject E2's HELP scores were eleven months in social skills and nine months in cognitive skills. This subjects social skills score increased by two months and the cognitive skills score remained the same. Subject E3's

HELP scores were eleven months in social skills and nine months in cognitive skills. This shows an increase of three months in social skills and two months in cognitive skills. Subject E4's HELP scores were twenty-two months in social skills and eighteen months in cognitive skills. This subject's social skills increased by two months and his cognitive skills increased by three months. Subject E5's HELP scores were twelve months in social skills and ten months in cognitive skills. This shows an increase of five months in social skills and three months in cognitive skills. Subject E6's HELP scores were twenty months in social skills and thirteen months in cognitive skills. This subject's social skills increased by two months and his cognitive skills increased by one month. Subject C1's HELP scores remained the same, ten months in social skills and eleven months in cognitive skills. Subject C2's HELP scores were thirteen months in social skills, which is a one month increase and the cognitive skills remained constant, twelve months. Subject C3's scores remained the same in social skills, twelve months, and her cognitive skills rose by one month to thirteen months. Subject C4's scores remained twelve months in both social and cognitive skills. Subject C5's scores remained constant, twelve months in social skills and ten months in cognitive skills. Subject C6's scores rose one month in social skills to twelve months and remained eleven months in cognitive skills.

One tailed T-tests were used to calculate the difference between the pre-tests and post-tests of the experimental and control groups. In the area of social skills, t=1.22 for the pre-test scores. This indicates that at the .05 level, there is no statistically significant difference between the pre-test social skills scores of the children placed in inclusive classrooms and the children who were not placed in inclusive classrooms. In calculations of the post-test social skills scores, t=2.06. At the .05 level, the post-test show that the there is a statistically significant difference between the social skills of the children who were placed in the inclusive classroom and the children who were not placed in the inclusive classroom. The t-Test value for the pre-test cognitive skills scores was .78. At the .05 level, there was not statistically significant difference between the cognitive skills of the children who were placed in inclusive classroom and the children who were not placed in inclusive classroom. For the post-test cognitive skills scores, t=1.41. This also indicates that there is no statistically significant difference between the cognitive skills of the children who were placed in the inclusive classroom and the children who were not placed in the inclusive classroom at the .05 level, but, there was a notable raise in the scores of the children who were placed in the inclusive classroom. Despite the lack of a statistically significant difference, the scores of the subjects in the experimental group rose more than the scores of those in the control group.

Table 1

t-Test Analysis Of The Social Skills Pre-test Scores Between The Children Placed In An Inclusive Classroom And The Children Not Placed In The Inclusive Classroom

GROUPS	MEAN	STANDARD DEVIATION	DEGREES OF FREEDOM	t-TEST VALUE	PROBA-BILITY
CHILDREN IN INCLUSIVE CLASS	15.11	6.33	8	1.22	NO STATISTICAL SIGNIFICANCE
CHILDREN NOT IN INCLUSIVE CLASS	11.67	1.03	6	1.22	NO STATISTICAL SIGNIFICANCE

TABLE 2

t-Test Analysis Of The Social Skills Post-Test Scores Between The Children Placed In The Inclusive Classroom And The Children Not Placed In The Inclusive Classroom

GROUPS	MEAN	STANDARD DEVIATION	DEGREES OF FREEDOM	t-TEST VALUE	PROBA -BILITY
CHILDREN IN INCLUSIVE CLASS	16.78	5.40	8	2.06	STATISTICAL SIGNIFICANCE AT .05
CHILDREN NOT IN INCLUSIVE CLASS	11.83	.99	5	2.06	STATISTICAL SIGNIFICANCE AT .05

TABLE 3

t-Test Analysis Of The Cognitive Skills Pre-test Between The Children Placed In The Inclusive Classroom And The Children Not Placed In The Inclusive Classroom

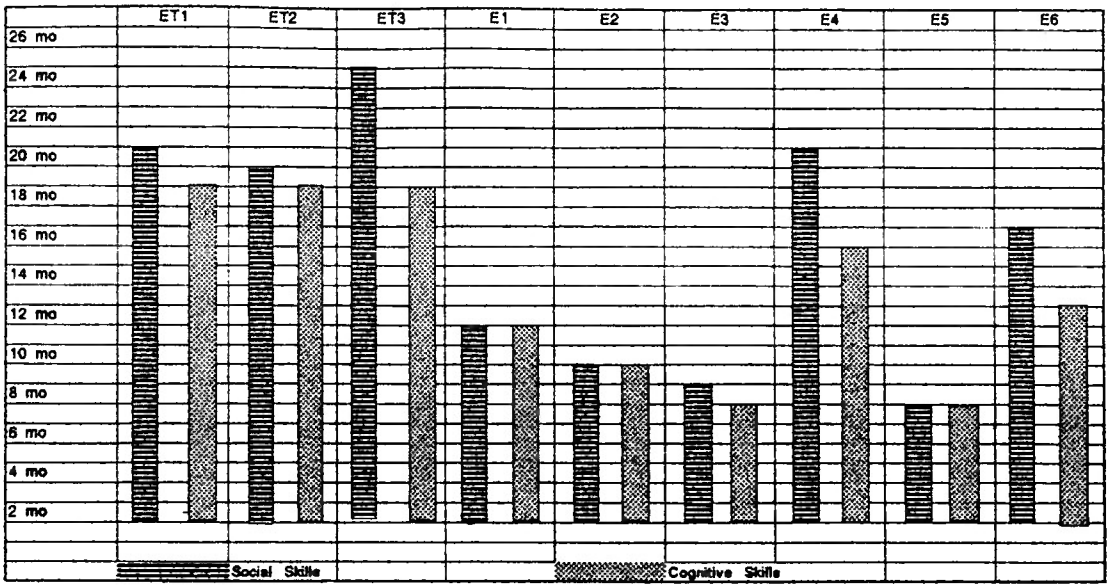
GROUPS	MEAN	STANDARD DEVIATION	DEGREES OF FREEDOM	t-TEST VALUE	PROBA-BILITY
CHILDREN IN INCLUSIVE CLASS	13.11	4.58	8	.78	NO STATISTICAL SIGNIFICANCE
CHILDREN NOT IN INCLUSIVE CLASS	11.5	1.05	5	.78	NO STATISTICAL SIGNIFICANCE

TABLE 4

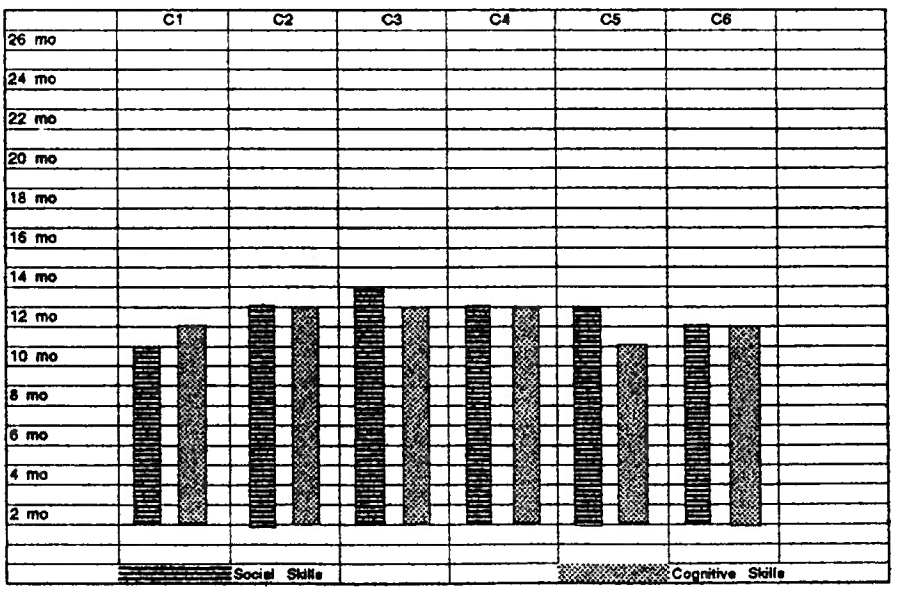
t-Test Analysis of The Cognitive Skills Post-test Between The Children Placed In The Inclusive Classroom And The Children Not Placed In The Inclusive Classroom

GROUPS	MEAN	STANDARD DEVIATION	DEGREES OF FREEDOM	t-TEST VALUE	PROBA-BILITY
CHILDREN IN INCLUSIVE CLASS	14.33	4.47	8	1.41	NO STATISTICAL SIGNIFICANCE
CHILDREN NOT IN INCLUSIVE CLASS	11.5	1.05	6	1.41	NO STATISTICAL SIGNIFICANCE

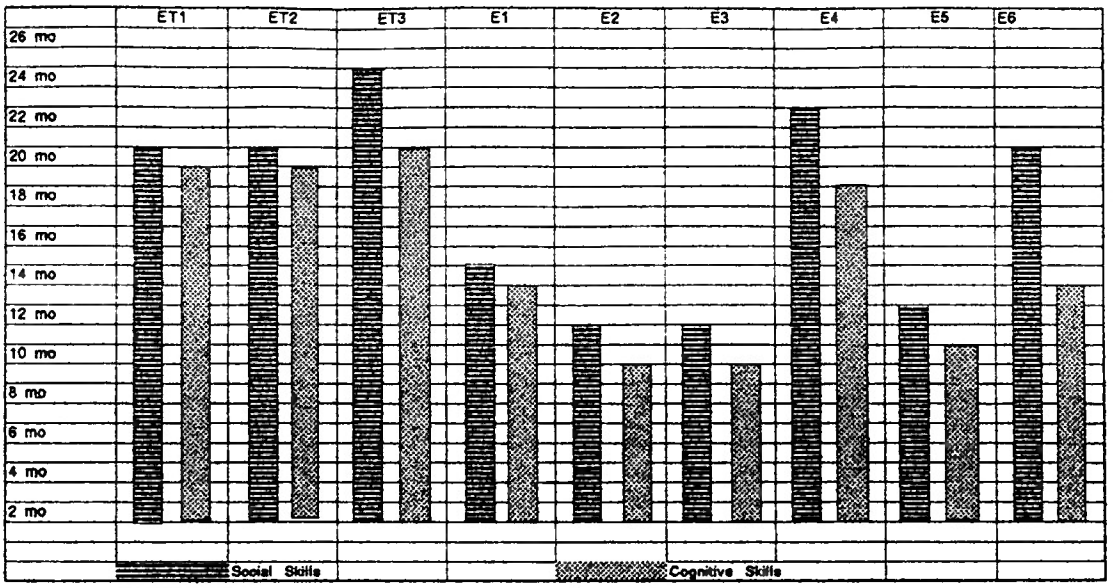
Pre-Test Scores Of The Children Placed In The Inclusive Class - Figure 1



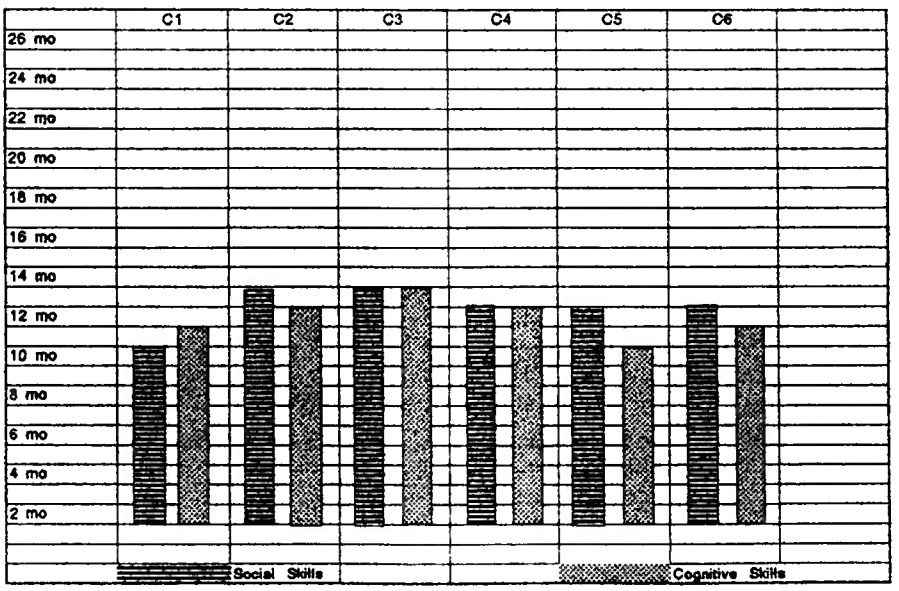
Pre-Test Scores Of The Children Not Placed In The Inclusive Class - Figure 2



Post-Test Scores Of The Children Placed In The Inclusive Class - Figure 3



Post-Test Scores Of The Children Not Placed In The Inclusive Class - Figure 4



CHAPTER FIVE

DISCUSSION

Although all of the findings of this evaluation were not statistically significant, the findings do suggest that exposure to typically developing children is a valuable method of stimulating the development of children with special needs. This stimulation occurs naturally through simple, daily interactions between the children. A study conducted by Joseph Jenkin's and his associates on children with learning disabilities in regular, remedial, and special education classrooms revealed that those children placed in regular classrooms had higher levels of vocabulary that those students placed in remedial or special education classrooms[27]. Levine and Edgar conducted a study on postgraduates of regular education and special education classes. Their findings indicated that those students educated in regular schools were more likely to attend a post secondary school, live independently, and become married. [28] This is a good indication that children with special needs are more likely to develop appropriate socialization skills with the help of their typical counterparts.

---

[27] Jenkins, Jewell, Leicester, and O'Conner, 344.

[28] Levine and Edgar, 334.

The results of this evaluation propose that inclusion in the early years of life is beneficial to the children with special needs. Martin Block, in his studies on the benefits of inclusion, has also found that even preschool children can provide support for children with disabilities.[29] These programs must be monitored closely to assure that the children receive the extra stimulation and education that inclusion does not provide. This extra stimulation includes one on one or small group developmental, physical, speech, and occupational therapies, as well as any other types of adult stimulation.

IMPLICATIONS FOR SOCIAL WORK

There are two important implications for Social Work, specifically, School Social Work. First, because the finding of this evaluation indicate that children with special needs benefit, to some extent, from exposure to their typically developing counterparts, School Social Workers must educate parents, administrators, and teachers on the many benefits and challenges of inclusive programs. Second, School Social Workers must advocate for the rights of the children with special needs to assure that they will be educated in the least restrictive environment, whether that be a self contained or inclusive classroom setting.

---

[29] Block, 47.

IMPLICATIONS FOR FUTURE USE

A specific recommendation for future use is for The Elaine Clark Variety Center, where the evaluation was conducted. It is suggested that each of the six classrooms at the center be comprised of both children with and with out special needs. This should be done to assure that all of the children with special needs have an opportunity to benefit from the stimulation which is provided by the typical children. It is imperative that the teachers do not rely solely on the stimulation provided by the typical children, but also continue implementing the one to one and small group therapies. It is also recommended that inclusive programs be implemented in preschools across the country, provided that the programs have been well planned and will be well supervised and evaluated.

APPENDIX

November 13, 1995

Dear Parents,

In partial requirement for completion of a Master's Degree in Social Work at the Clark Atlanta University School of Social Work, I am required to write a thesis. The topic of my thesis is "The Effects Of Inclusion On The Cognitive and Social Skills of Preschool Children." I hope to conduct my observations in your child's classroom at Elaine Clark. The thesis will not contain the names of any of the children involved in the evaluation, only the results of the observations made. If you do not have any objections, please sign and date below. If you have any questions, please do not hesitate to call me at 770-458-3251.

Thank you,

Joi Hill
Social Services Coordinator

_____ _____

Signature Date

BIBLIOGRAPHY

Bailey, Donald, Jr. Assessing Infants and Preschoolers with Handicaps. Columbus: Merrill Publishing Company, 1989.

Block, Martin E. "Including Preschool Children with Disabilities" Journal of Physical Education 27 (August 1994): 45-50.

Bramlett, Ronald K., Billy L Smith, and Jane Edmonds. "A Comparison of Non-referred Learning Disabled and Mildly Mentally Retarded Students Utilizing the Social Skills Rating System." Psychology in the Schools 31 (January 1994): 13-19.

Brower, Aaron M., and Paula Norius. Social Cognition and Individual Change: Current Theory and Counseling Guidelines. London: Sage Publications, 1993.

Center, Yola, and Craig Curry. "A Feasibility Study of a Full Integration Model Developed for a Group of Students Classified as Intellectually Disabled." International Journal of Disability, Development and Education 40 (January 1993): 217-235.

Eshel, Yohanan, Michael Katz, Sara Gilat, and Carlos Nagler. "Mainstreamed or Self Contained Classes for Students with Mild Learning Disability: The Case Of Israel." International Journal of Disability, Development, and Education 41 (August 1994): 185-200.

Hambre, Susan, Jo Hendrickson, and John Nietupski. "Regular Educators' Perceptions of Facilitating Friendships of Students with Moderate, Severe, or Profound Disabilities with Peers." Education and Training in Mental Retardation and Developmental Disabilities 29 (June 1994): 102-117.

Hollowood, Tia, Christine Salisbury, Beverly Rainforth, and Mary Palombaro. "Use of Instructional Time in Classrooms Serving Students With and Without Severe D Disabilities." Exceptional Children 61 (December 1994/ January 1995): 242-265.

Hunt, Pam, Felicia Farron-Davis, Susan Beckstead, and Deborah Curtis. "Evaluating the Effectiveness of Placement of Students with Severe Disabilities in General Education versus Special Education Classes." Journal of the Association for Persons with Severe Handicaps 19 (Fall 1994): 200-221.

Jenkins, Joseph, Mark Jewell, Norma Leicester, and Rollanda O'Conner. " Accommodations for Individual Differences Without Classroom Ability Groups: An Experiment in School Restructuring." Exceptional Children 60 (February 1994): 344-362.

Kennedy, Craig, and Tiina Itkonen. "Some Effects of Regular Class Participation on the Social Contacts and Social Networks of High school Students with Severe Disabilities." Journal of the Association for Persons with Severe Handicaps 19 (Spring 1994): 1-10.

Kostka, Maralyn. "A Comparison of Selected Behaviors of a Student with Autism in Special Education and Regular Education Classes." Music Therapy Perspectives 11 (May 1993): 57-60.

Levine, Phyllis, and Eugene Edgar. "Respondent Agreement in Follow-Up Studies of Graduates of Special Education and Regular Education Programs." Exceptional Children 60 (February, 1994): 334-348.

McCall, Renee'. "An Inclusive Preschool Physical Education Program." Journal of Physical Education 4 (January, 1994): 45-47.

Meadows, Nancy, Richard Neel, Catherine Scott, and Geralyn Parker. "Academic Performance, Social Competence, and Mainstream Accommodations." Behavioral Disorders 19 (May 1994): 170-180.

O'Neil, James. "Can Inclusion Work." Educational Leadership 52 (December 1994/January 1995): 7-11.

Reeves, Rebecca. "Inclusive School Communities: Ten Reasons Why." Inclusion Project (September 1993): 7-9.

Smelter, Richard W. "Benefits and Challenges of Inclusion." Educational Leadership 52 (December 1994/January 1995): 53-61.

Zanden, James W. Vander. Human Development. New York: McGraw-Hill Inc., 1993.